

ABSTRACT OF THE DISCLOSURE

A semiconductor manufacturing apparatus includes: a calculation unit having at least one computer for processing semiconductor design information; a control unit for controlling  
5 radiation of an electron in accordance with a processing result of the semiconductor design information; a writing unit for radiating an electron in accordance with instructions of the control unit; and at least one storage device. The semiconductor  
10 manufacturing apparatus permits a communication between the storage device, the calculation unit, the control unit, and the writing unit. The semiconductor manufacturing apparatus further includes a communication pass through which the storage device can be controlled.